

WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2002HI2B

Title: A win-win approach to water pricing and watershed conservation

Project Type: Research

Focus Categories: Economics, Conservation, Water Supply

Keywords: economics; allocation; pricing; conservation

Start Date: 03/01/2002

End Date: 02/28/2003

Federal Funds Requested: \$24,375

Non-Federal Matching Funds Requested: \$48,986

Congressional District: Hawaii 1st

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Abstract

An integrated model of water pricing and watershed conservation will be developed. The benefits of adopting the efficient integrated policy will be compared to the status quo policy of under-pricing water and under-maintaining the watershed and to the policy of adopting efficient pricing without efficient watershed management. The model will be applied to Leeward Oahu. In particular, we will explore the hypothesis that efficient watershed maintenance will lower the efficiency price of water enough to offset the increase in price required for efficiency pricing without proper maintenance. This leads to the possibility of a win-win-win situation. Current consumers avoid the severe water rationing that would accompany the continuation of current pricing policies in the face of substantial watershed damage. Future consumers avoid the inevitably high prices associated with the required use of desalinated water. Tourists and other consumers of the environment also win, making the policy a prototype for sustainable resource management and sustainable tourism.